



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/759,403

01/16/2004

David V. Rowell

D-F 101-45

7482

7590

06/22/2006

Terry B. McDaniel
768 Robert E. Lee Blvd
Charleston, SC 29412

EXAMINER

TORRES VELAZQUEZ, NORCA LIZ

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/759,403

Applicant(s)

ROWELL ET AL.

Examiner

Norca L. Torres-Velazquez

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the city and either state or foreign country of residence of each inventor. The residence information may be provided on either an application data sheet or supplemental oath or declaration.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claim 1 recites "...of laid and needled textile organic fibers." Are Applicants referring to the polypropylene and polyester fibers when reciting organic fibers? Claims 2-15 are rejected as being dependent on claim 1.

For examining purposes, the Examiner interprets the claim as claiming a needled nonwoven textile composite comprising a blend of textile organic fibers, the blend comprising at least polypropylene textile fibers and polyester textile fibers.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1771

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2 and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by PEOPLES, Jr. (US 4,568,581).

PEOPLES, Jr. disclose nonwoven web used to form molded articles. (Refer to Col. 2, lines 7-8) The nonwoven web is formed from a needled blend of two or more different types of fibers, including relatively high melting fibers, and relatively low melting thermoplastic fibers which, when heated, form bonds and serve to bind together the fibers and provide the desired stiffness and shape retention characteristics. The high melting fibers may be blended with one or more types of lower melting thermoplastic fibers, such as liner low density polyethylene, high density polyethylene fibers, polypropylene fibers, lower melting polyesters, among others. Suitable high melting fibers include polyesters, nylon, glass, Nomex® and Kevlar®. The preferred high melting fibers are polyester fibers. The reference teaches using high melting polyester fibers at a rate of from about 20% to about 70% by weight. (Col. 3, lines 49-68 through Col. 4, lines 1-12) In Figure 6, the reference show the method of producing the nonwoven web and shows the inclusion of an optional third fiber component 17.

The Examiner equates the high melting polyester fibers of the reference to the presently claimed polyester fibers, it is noted that the range of 20-70% taught by the reference meets the presently claimed ranges. The low melting polypropylene fibers taught by the reference are equated to the presently claimed polypropylene fibers, and the teaching of having more than one low melting fibers component is equated to the claimed binder fiber since the low melting thermoplastic fibers serve to bind the fibers together.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8-15 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over PEOPLES, Jr. (US 4,568,581).

Although PEOPLES, Jr. does not explicitly teach the claimed fabric loss it is reasonable to presume that fabric loss of less than 4.0 wt% (less than 3.0 wt%, less than 2.0 wt%) after 1000 (or 1400 or 2000 or 2500 accordingly), cycles is inherent to nonwoven web of PEOPLES, Jr. Support for said presumption is found in the use of like materials (i.e. the reference uses similar textile fibers and is made by a similar process of needling). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of fabric loss would obviously have been present one the PEOPLES, Jr. product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over PEOPLES, Jr. '581 as applied to claim 2 above, and further in view of PARLIN (US 3,719,546).

PEOPLES, Jr. is silent to the use of a yarn lubricant.

PARLIN is directed to a needled nonwoven fabric comprised of thermoplastic fibers in which, part of the fibers are mobile and carry a lubricant. (Refer to Col. 1, lines 8-24)

Art Unit: 1771

Since both references are directed to needled nonwoven fabrics, the purpose disclosed by PARLIN would have been recognized in the pertinent art of PEOPLES, Jr.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the nonwoven of PEOPLES, Jr. and provide with fibers that carry a lubricant with the motivation of allowing the mobile fibers to be deflected more readily by tufting needles that will result in little loss or change in the strength of the fabric when it is tufted. The lubricant also reduces pounding and noise due to tufting operations and it prevents the tufting needles from reaching a temperature where damage to the tufting yarns may result. (Col. 1, lines 8-24 of PARLIN)

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. ZAFIROGLU et al. (US 2004/01491470 A1)

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-5:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Norca L. Torres-Velazquez
Primary Examiner
Art Unit 1771

June 16, 2006